AMENDMENTS TO THE CLAIMS

Docket No.: 04306/0202213-US0

(Currently Amended) A resonant arrangement for a linear compressor, comprising:

a non-resonant assembly formed by a motor and a cylinder[[(1)]];

a resonant assembly formed by a piston [[(2)]] reciprocating inside the cylinder [[(1)]], the cylinder being closed by a cylinder head defining between a top portion of the piston and said cylinder head a compression chamber;

an actuating means [[(3)]] coupled to the bottom portion of the piston operatively coupling the piston [[(2)]] to the motor; and

at least one spring means, mounted to the resonant-assembly actuating means and which is elastically and axially deformed toward the displacement of the piston [[(2)]], eharaeterized in that wherein the spring means presents an elongated tubular body [[(50)]], which is coaxial in relation to the axis of the piston [[(2)]] and an end [[(51)]] operatively coupled to the actuating means [[(3)]] and an opposite end [[(52)]] operatively coupled to the non-resonant assembly, said tubular body [[(50)]] having at least part of the extension thereof folded in circumferential sectors [[(52)]] that are symmetric in relation to the axis of said tubular body [[(50)]], each circumferential sector [[(53)]] being elastically deformed in the axial direction upon displacement of the piston [[(2)]].

- (Currently amended) The resonant arrangement according to claim 1, characterized in that the circumferential sectors II(53)II present the same cross section profile.
- (Currently amended) The resonant arrangement according to claim 2, characterized
 in that each circumferential sector [[(53)]] presents a substantially "V" shaped
 profile, each circumferential sector [[(53)]] being elastically deformed by variation of
 its respective dihedral angle.

Docket No.: 04306/0202213-US0

Application No. 10/519,618 Amendment dated July 18, 2007 Reply to Office Action of April 18, 2007

- (Currently amended) The resonant arrangement according to claim 3, characterized in that the circumferential sectors [[(53)]] present the same dihedral angle.
- (Currently amended) The resonant arrangement according to claim 1, characterized in that the circumferential sectors [[(53)]] are orthogonal to the longitudinal axis of the tubular body [[(50)]].
- (Currently amended) The resonant arrangement according to claim 1, characterized in that the tubular body [[(50)]] presents a non-hollow lateral surface [[(54)]].
- 7. (Currently amended) The resonant arrangement according to claim 1, characterized in that the fixation of each end [[(52, 52)]] to the adjacent part defined by the cylinder [[(1)]] and the actuating means [[(3)]] is obtained by one of the processes of welding, gluing and screwing.
- 8. (Currently amended) The resonant arrangement according to claim 7, characterized in that each one of the ends [[(51, 52)]] of the tubular body [[(50)]] is defined by a respective tubular extension not presenting the circumferential sectors [[(53)]] and dimensioned to provide a fitting to the respective part to which it is affixed.
- 9. (Currently amended) The resonant arrangement according to claim 8, characterized in that each part to which is affixed an adjacent end [[(51, 52)]] of the tubular body [[(50)]] is provided with at least one circumferential tooth [[(1a, 3a, 3b, 10a)]] which is coaxial to the axis of the piston [[(1)]] for fitting said respective end [[(51, 52)]].
- (Currently amended) The resonant arrangement according to claim 9, characterized in that each circumferential tooth [[(1a, 3a, 3b, 10a)]] is continuous.
- (Currently Amended) The resonant arrangement according to claim 6, in-which the
 eylinder (1) is closed by a cylinder head (30) defining between a top portion of the
 piston (2) and said-cylinder head (30) a compression chamber (9), characterized in
 that wherein the tubular body [[(50)]] has an end [[(51)]] hermetically affixed to the

Application No. 10/519,618 Docket No.: 04306/0202213-US0

Amendment dated July 18, 2007 Reply to Office Action of April 18, 2007

cylinder [[(1)]] and the opposite end [[(52)]] hermetically affixed to the actuating means [[(3)]], in order to block the fluid communication between the compression chamber [[(9)]] and the exterior of the cylinder [[(1)]] through gaps existing between the piston [[(2)]] and the cylinder [[(1)]].

12. (Currently Amended) The resonant arrangement according to claim 1, in which the hermetic compressor comprises a hermetic shell [[(10)]], inside which are mounted the resonant and the non-resonant assemblies, eharaeterized—in—that wherein it comprises another spring means in the form of a tubular body [[(50)]], which is coaxial in relation to the axis of the piston and having an end [[(50)]] affixed to the actuating means [[(3)]] and the other end [[(52)]] affixed to the shell [[(10)]], said tubular body having at least part of the extension thereof folded in circumferential sectors that are symmetric in relation to the axis of said tubular body, each circumferential sector being elastically deformed in the axial direction upon displacement of the piston.